

From glowbugs@theporch.com Mon Nov 11 17:01:41 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com
(8.8.2/AUX-3.1.1) with SMTP id QAA21676; Mon, 11 Nov 1996 16:53:51 -0600 (CST)
Date: Mon, 11 Nov 1996 16:53:51 -0600 (CST)
Message-Id: <199611112253.QAA21676@uro.theporch.com>
Errors-To: conard@tntech.campus.mci.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 349
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 349

Topics covered in this issue include:

- 1) 6HF5 bottles needed
by "Brian Carling" <bry@mail1.mnsinc.com>
- 2) Best way to copy pages of fragile books?
by mjsilva@ix.netcom.com (michael silva)
- 3) Re: Best way to copy pages of fragile books?
by "'AB7HI' Stephen Lee" <slee@u.washington.edu>
- 4) Re: Update on gutting amplifier...
by Doug <doug@sunrise.alpinet.net>
- 5) Re: Update on gutting amplifier...
by "Brian Carling" <bry@mail1.mnsinc.com>
- 6) Re: Frequencies?
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 7) Any Glowbuggers like/use AM?
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 8) possible BA/GB net 160M QRG QSY
by Conard Murray <conard@TNTECH.CAMPUS.MCI.NET>
- 9) Re: possible BA/GB net 160M QRG QSY
by "Brian Carling" <bry@mail1.mnsinc.com>
- 10) Re: Update on gutting amplifier...
by aa7ya@juno.com
- 11) Capacitance Measured in "Plates"
by "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>
- 12) Re: UY227, and other tubes for regen service
by jlevro@shore.net (John Levreault)
- 13) Re: Capacitance Measured in "Plates"
by rdkeys@csemail.cropsci.ncsu.edu

- 14) BA/GB net bust lately
by rdkeys@csemail.cropsci.ncsu.edu
- 15) 160 BA net
by Merv Schweigert <k9fd@htc.net>
- 16) Re: 160 BA net
by Dave Hockaday <wb4iuy@ipass.net>
- 17) Thanks to K40AH
by jkh@lexis-nexis.com (John Heck)
- 18) Hey Brian - how about an update on the receiver?
by Gordon Gekko <gekko@nwlink.com>
- 19) TNX for the AM response!
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 20) 6293 tube
by "Brian Carling" <bry@mail1.mnsinc.com>
- 21) Transformers available
by Gordon Gekko <gekko@nwlink.com>
- 22) Re: Hey Brian - how about an update on the receiver?
by jeffd@coriolis.com (Jeff Duntemann)
- 23) CQ CQ CQ GB! (WAS: Re: BA/GB net bust lately)
by "Brian Carling" <bry@mail1.mnsinc.com>

Date: Sun, 10 Nov 1996 17:28:14 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: 6HF5 bottles needed
Message-ID: <199611110126.UAA22996@user2.mnsinc.com>

Anyone have some they don't need in those mini tube banks out there?

Thanks - 73

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Sun, 10 Nov 1996 17:34:41 -0800
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Best way to copy pages of fragile books?
Message-ID: <199611110134.RAA25227@dfw-ix4.ix.netcom.com>

Hi gang,

I've found myself a little reluctant to subject some of my older books to standard copiers (especially when you have to smash them down to get the inside edge clear...). Are there gentler ways to make copies of articles in such books? I just know some of the bindings can't take much of this, and I'd like to find an alternative (make that a cheap and easy alternative).

73,
Mike, KK6GM

Date: Sun, 10 Nov 1996 18:00:30 -0800 (PST)
From: "'AB7HI' Stephen Lee" <slee@u.washington.edu>
To: michael silva <mjsilva@ix.netcom.com>
Subject: Re: Best way to copy pages of fragile books?
Message-ID: <Pine.A41.3.95b.961110175301.47242A-100000@homer04.u.washington.edu>

You'll find that university libraries will typically have a copier for use with archived books and research material. Rather than laying flat on the copy glass, one leaf of the book dangles off the side at an angle to minimize stress on the spine or pages. Perhaps some county libraries also have one or more of these kinds of copiers. (Ours don't.)

Good luck!
Stephen Lee, AB7HI
slee@u.washington.edu

Date: Sun, 10 Nov 1996 19:42:07 -0700
From: Doug <doug@sunrise.alpinet.net>
To: glowbugs@theporch.com
Subject: Re: Update on gutting amplifier...
Message-ID: <3286927F.4568@alpinet.net>

Dave wrote:
>
>
> Hi gang,
>
> Thanks for all the input on whether to 'gut the amp' or not. The
> 'Save The Amp' crowd has won!!! I've been convinced to keep it just
> as it is, since it is a functioning glow-in-the-dark-object (GITDO)

> and somewhat hard to come by.
>
> Larry in Maine has convinced me that an old chassis he is selling to
> me would make a much finer RF box, and my amp could become a modulator
> for the local 75m AM net that hogs space around here on the weekends.
>
> He has suggested using the output transformer as a 'Heising Choke' to
> modulate my transmitter. I no longer have any old handbooks of the
> FireBottle era, so maybe someone could fill me in as to how that is
> done. The transformer is a standard low wattage output job with
> 4 ohm, 8 ohm, and 25volt outputs designed for driving speakers directly.
> It's a little on the overkill side as a receiver audio stage (!), so
> I was thinking along the lines of modulator.
>
> Any tips would be appreciated.
>
> 73's
>
> Dave
>
> gekko@nwlink.com
> kenwood@nwlink.com (at work)
>
> * * * *
>
> "Sure it's 1939 technology...but it's GOOD 1939 technology"
Hi Dave...I see you've made up your mind on the Hifi amp. One thing
to consider before you try to use that monster in Modulator service.
Your amp as designed no doubt has 15,000 cycle response, so if you were
to put it on the air unmodified, your signal using AM (abominal
modulation) could be 30kc wide!!!, not counting any non-linearitys
that are going to widen it out even more. So, you'll have to add some
bandwidth limiting filters, holding response down to an acceptable
freq range of 300-3000 cps...most likley in the first audio stage.
Our phone bands are getting more and more crowded...a big, fat AM
signal like that one might produce would'nt win you any friends on
the band.

Heising modulation needs to be done right, or it'll cause all kinds
of nastys outside your audio passband...watch the bias on the RF stage,
keeping a nice, clean pattern on the scope.

Good luck and have fun...

"No, a chassis punch is not a kick to the backside"

Doug Dunn, K7YD
Livingston, MT

Date: Sun, 10 Nov 1996 19:36:54 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: Re: Update on gutting amplifier...
Message-ID: <199611110334.WAA27484@user2.mnsinc.com>

HEY! It's a reply from AF4K!

Tsy DOug - that's "ADVANCED MODULATION" if you don't mind!
You are in the WRONG group to be slamming AM like that, he he!

It is VERY unloikely that he is going to be 30 kHz wide even with that type of mod scheme. Or am I mistaken? Aren't their some other limiting factors?

I know plenty of AM ops who deliberately BROADEN the freq response of the audio chain in their Valiants, Couriers, BC-610s and the like for more hi-fi sounding audio! I doubt that it is going to make them as "unpopular" as you claim, given the fact that on any given day, their may be ONE AM QSO on 40m AM in the afternoon, and maybe ONE on 80m in the evening! They HARDLY occupy an excessive amount of bandwidth
>From what I hear!

by the way, we (me especially!) are drifting off frequency here as far as appropriate
topics for GB! Are you using or building any glow-in-the-dark rigs yourself?

On 10 Nov 96, Doug wrote:

> Hi Dave...I see you've made up your mind on the Hifi amp. One thing
> to consider before you try to use that monster in Modulator service.
> Your amp as designed no doubt has 15,000 cycle response, so if you
> were to put it on the air unmodified, your signal using AM (abominal
> modulation) could be 30kc wide!!!, not counting any non-linearitys
> that are going to widen it out even more. So, you'll have to add
> some bandwidth limiting filters, holding response down to an
> acceptable freq range of 300-3000 cps...most likley in the first
> audio stage. Our phone bands are getting more and more crowded...a
> big, fat AM signal like that one might produce would'nt win you any
> friends on the band.
>
> Heising modulation needs to be done right, or it'll cause all kinds
> of nastys outside your audio passband...watch the bias on the RF
> stage, keeping a nice, clean pattern on the scope.
>

> Good luck and have fun...

1) Not all mics have response up to 15000 Hz

Also, WHAT HUMAN VOICE has a lot of content out to that range when emitting normal speech? The amplifier has tone controls.

He would likely have to sing, whistle or play music and turn the TREBLE all the way up to get much voltage out at 15 kHz wouldn't you think?

Why THAT is almost up to the TV sweep frequency of 16 kHz or so.

You may be exaggerating the likelihood of the problem here but I could be wrong.

Bry

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*****
*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** http://www.mnsinc.com/bry/ *
*****
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Date: Sun, 10 Nov 1996 22:36:29 -0600

From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>

To: glowbugs@theporch.com

Subject: Re: Frequencies?

Message-ID: <1.5.4.32.19961111043629.006cbf40@postoffice.worldnet.att.net>

At 03:26 AM 11/7/96 +0000, you wrote:

>Brian Carling wrote:

>> On 5 Nov 96, Doug wrote:

>>

>> > Hi Folks...I'm new to the list...was just curious which, if any
>> > freqs have become hangouts for the Glowbug rigs? I'm a past builder
>> > of the type of rig that seems to be popular here...34 years ago they
>> > were the only way I could afford to be on the air. My best rig was
>> > a 6AG7/pair 1625 setup that ran for many years, although I've built
>> > them from 6V6, 6L6, 6J6 and 6AW8's...allways a blast.

>> >

>> > Have fun and keep up the interesting posts.

>> >

>> > Doug Dunn, K7YD

>> > Livingston, MT

>> >

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*****
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>HI Bry...thanks for the info...color crystals...a great idea! I'll

>dig out something for an RF generator and get up on the air...mite
>even fire up the QRP rig and listen anyhow.
>
>It's hard to explain my starts...typical kid Ham...all fire and NO Bux!
>So, the "Glowbug" approach was not just for fun, but was the only way
>to the "Ether" for me. I started with a 6V6 rig...built from the '50
>ARRL HB...worked like a champ...on 40, 20 and 10!!! All at the same
>time. Fortunatly for me, a friendly grey haired old W7 got me by the
>ear and we learned the virtues of METAL housings, and of course how to
>build a resonant antenna that worked. So, my early building was off
>and running...'found out I can make almost ANY tube oscillate...some
>well, some, well...not so good. This went on for some years 'til I
>got my hands on an ART13...real Collins!!! and off I went again....
>Yes...I've still got one.
>
>I cut my teeth on Morse, and am still active with it...easier and
>cheaper to build rigs for it.
>
>So...'guess that's it...watch out for NWP...He's a "Glowbugger" in
>Digital Geek's clothes.
>
>73's...have a blast
>
>Doug Dunn, K7YD
>Livingston, MT
>

Yes I used tubes in the early 70's (and got "hooked" on them too) because I had to scrounge for parts as a teen with little money. Like Doug I worked a lot of CW. My first "real" ham rig (other than the Hammurland HQ-180c & homemade transmitters) was an ART-13 and Collins 75A-4 reciever I picked up for \$5 at a ham auction I attended in 1976. I had been on the air only 2 years and was the only bidder for the old stuff! Found I had to mostly keep CW as the SSB users wouldn't reply back to my 100W AM signal. Later I kept buying tube SW recievers and what transmitters I could find. Just love that red glow! First SSB HF rig was a Hallicrafters SR-2000 I got on 1983. Finally I could talk voice although I found I really liked AM since I had built my own Kilowatt 50's era plate modulated transmitter in the late 70's. That 813 rig is still used today while I'm waiting for a Collins KW-1. At current collector prices I may be waiting a very long time. At least I own a KWS-1 along with 23V-2 & 32V-3 transmitters. Yep, This Glowbugger really loves Tubes!

Robert M. Bratcher Jr.

E-mail to:

bratcher@worldnet.att.net

Record collector, 8mm, super 8, 16 and 35mm Film collector.

I like old radio's too.

Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Sun, 10 Nov 1996 23:30:51 -0600
From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
To: glowbugs@theporch.com
Subject: Any Glowbuggers like/use AM?
Message-ID: <1.5.4.32.19961111053051.006f3c3c@postoffice.worldnet.att.net>

I just like the sound of AM over SSB. Thankfully some hams on 75 & 40 still use this outmoded AM stuff. Yes I'm building my first CW only tube rig (10 watts or so) in a long time. Don't know what I'll use yet. Maybe the old 6L6 standby...

Just wanted to know if I'm the only AM fan on the group or not.
BTW I'm 37 years of age.

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Mon, 11 Nov 1996 03:22:43 -0600
From: Conard Murray <conard@TNTECH.CAMPUS.MCI.NET>
To: glowbugs@theporch.com
Cc: boatanchors@theporch.com
Subject: possible BA/GB net 160M QRG QSY
Message-ID: <1.5.4.32.19961111092243.00693598@tntech.campus.mci.net>

Hello firebottle fans!
I was wondering if anyone has any comments regarding switching the GB/BA net from 1803.5 to 1843 Kc/s? This is a popular surplus xtal frequency. I noticed in the last Jameco catalog that they had rocks for 1843 Kc/s for \$1.00 and 3579 rocks for a whopping 25 cents.
Thanks,
de Conard, WS4S

Conard Murray	WS4S	NNNOUTN	Glowbugs Listowner
217 Dyer Avenue			BA/GB net 1802.5/3579.5/7050 KHz
Cookeville, Tn	38501		conard@tntech.campus.mci.net
615-526-4093			Wise men still seek Him

- LICENSED ONLY TO EXTENT INDICATED ON CARTON -

Date: Mon, 11 Nov 1996 04:47:41 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: Re: possible BA/GB net 160M QRG QSY
Message-ID: <199611111245.HAA07733@user2.mnsinc.com>

HEY! It's a reply from AF4K!
On 11 Nov 96, Conard Murray wrote:

> Hello firebottle fans!
> I was wondering if anyone has any comments regarding switching the
> GB/BA net from 1803.5 to 1843 Kc/s? This is a popular surplus xtal
> frequency. I noticed in the last Jameco catalog that they had rocks
> for 1843 Kc/s for \$1.00

That sounds like a good idea to me.
We could always check BOTH frequencies of course...
I need to get their catalog again...

Bry

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Mon, 11 Nov 1996 06:23:09 MST
From: aa7ya@juno.com
To: glowbugs@theporch.com
Subject: Re: Update on gutting amplifier...
Message-ID: <19961111.062056.5375.2.aa7ya@juno.com>

On Sun, 10 Nov 1996 20:45:08 -0600 (CST) Doug <doug@sunrise.alpinet.net>
writes:

> Hi Dave...I see you've made up your mind on the Hifi amp. One thing
> to consider before you try to use that monster in Modulator service.
> Your amp as designed no doubt has 15,000 cycle response, so if you
> were to put it on the air unmodified, your signal using AM (abominal

> modulation) could be 30kc wide!!!, not counting any non-linearities
> that are going to widen it out even more. So, you'll have to add some
> bandwidth limiting filters, holding response down to an acceptable
> freq range of 300-3000 cps...most likely in the first audio stage.
> Our phone bands are getting more and more crowded...a big, fat AM
> signal like that one might produce wouldn't win you any friends on
> the band.

30 kc's might be an exaggeration, unless the operator deliberately intended to use that for the HI-FI "effect". Most BC AM stations don't even modulate more than 10 kc's, with the exception of a few high powered Canadian. Even the high powered 50 KW nighttime stations, and they don't even sound "hi-fi", unless you happen to be lucky enough to have an AM radio that decodes C-QUAM modulation, which is similar to FM, it modulates the frequency in AM mode. I say that, because, there are few stations running this format, and few home radio's using this format.

But, I do agree there are quite a few AM'ers, and I am not slamming AM, that do tend to overmodulate, and call the rest of us "slop buckets", just because we want to share the spectrum with all.

> Doug Dunn, K7YD
> Livingston, MT

73 de Stacey - AA7YA
Whitetail - NE Montana, near the Great White North

Date: Mon, 11 Nov 1996 08:08:29 -0700 (MST)
From: "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>
To: Glowbugs <glowbugs@theporch.com>
Subject: Capacitance Measured in "Plates"
Message-ID: <Pine.SV4.3.91.961111080801.508B-100000@mesa5.mesa.colorado.edu>

In some very old radio books, the value of a variable capacitor is measured in "plates" (e.g. "a 46 plate capacitor"). Does anyone know the conversion between "plates" and pico-farads so I could build one of these circuits?

Thanks.

Jim Rybak

Date: Mon, 11 Nov 1996 10:15:43 -0500 (EST)
From: jlevro@shore.net (John Levreault)
To: Conard Murray <conard@tntech.campus.mci.net>
Cc: glowbugs@theporch.com
Subject: Re: UY227, and other tubes for regen service
Message-ID: <199611111515.KAA02377@relay1.shore.net>

>At 09:07 AM 11/9/96 -0600, you wrote:

>>Bob-

>

>>

>>I've thought about this. It doesn't take much capacitance, like around
>>.0068uf, to parallel-resonate with a 10H choke at around 600Hz, well, 610
>>actually. This could be placed from the plate of the amplifying tube to
ground.

>

>Hi John,

>I have thought/wished for this for a while too. Seems like a parallel
>circuit would short

>the B+ on the plate to ground though. Maybe a series capacitor could be used
>to block the DC path

>... good old 88mH toroids could be used here too with larger values of C.

>73 de Conard, WS4S

>

>

Conard-

Sorry about the confusion caused by my oversimplification. What I had in mind was to use this technique in the plate circuit of the detector, which is frequently "impedance-coupled" to the [first] audio amplifier. I was assuming that the plate voltage will be fed to the plate of the detector tube *through* the choke. The cap, then, would just be connected from the plate to ground. The Q will be rather low, though, owing to the high inductance. But this may be enough to give some degree of selectivity.

Additional selectivity could be provided after the audio amp. However, the problem of audio selectivity apparently did not plague hams back in the '30's like it does today. It seems to me that solving this problem in the spirit of '30's technology would be to:

1. follow the first audio amp, the tube immediately after the detector and presumably a triode, with a "plate-to-line" transformer, say 10K:600 ohms;
2. insert an L-C filter of the required selectivity and designed for a 600

ohm characteristic impedance;

3. terminate the filter with 600 ohms and a "line-to-grid" transformer, say 600:10K ohms;

4. follow with another stage of audio amplification for driving the headphones.

A dual triode would do a nice job here, like a 6SN7, although 56's or 76's would add real vintage charm. The bandwidth of the coupling transformers could be chosen for the application. For example, I just do CW, so "no-bandwidth" cheapies would do. AM'ers could spring for old UTC's with full audio bandwidth for the ultimate in fidelity.

What do you think?

73 de NB1I
John Levreault

Date: Mon, 11 Nov 1996 11:54:59 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: jrybak@mesa5.mesa.colorado.edu
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: Capacitance Measured in "Plates"
Message-ID: <9611111655.AA112394@csemail.cropsci.ncsu.edu>

> In some very old radio books, the value of a variable capacitor is
> measured in "plates" (e.g. "a 46 plate capacitor"). Does anyone know the
> conversion between "plates" and pico-farads so I could build one of these
> circuits?

There are no direct conversions unless you know the plate size in square inches and the plate spacing.

In the old days, it was common practice to refer to capacitors by plates in a very rough way. Thus, a broadcast capacitor might be one of 46 plates, while a short wave capacitor might be 15 plates and a fine tuning capacitor, such as used on early ham regen sets of the middle 20's might be 5 plates or a 5 plate unit stripped down to 1 or 2 plates. There were some Cardwells that were cast in very heavy plates with 1 set of plates (1 rotor and 2 stators for fine tuning use). They make good regen tuning capacitors when you can find them, and will about cover the modern 80M band from 3500-3800khz.

Thus a broadcast 500 pf would be a 46 plater, and a 100pf would be a 15

plater, and a 20 pf one a single plater, very roughly speaking.

As a spot check, go look through any known capacitors and get the plates and pf and compare. Plotting them, will provide a very general but imprecise function that could be used as a rough estimate for sizing capacitors by plates.

Other than that, there is no direct plate to pf rating, unless fairly precise plate dimensions and spacing are known.

It is mostly rules de thumb. Something like, ``01' 1AA built a new tuner after 1XAM's design and he got good results with a 15 plate condenser to cover the 200 meters and down region, with pretty sharp tuning on spark sets and very fine tuning on the new continuous wave sets'', etc.

73/ZUT DE NA4G/Bob UP

Date: Mon, 11 Nov 1996 13:02:59 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: glowbugs@theporch.com, boatanchors@theporch.com
Cc: rdkeys@csemail.cropsci.ncsu.edu ()
Subject: BA/GB net bust lately
Message-ID: <9611111803.AA112481@csemail.cropsci.ncsu.edu>

I have not had good luck on the BA/GB QRG on 80 or 160 and none at all on 40 at the 0000/0100/0200 times. Must be the bands or the competing RTTY. After 0230 or so, some of us get together on 3520, and last night Grandma Hartley was 459 into VE3land from NC on 2 watts, so I can't really complain that much about the bands. Must be the times are not right. I favor later times as better, if possible, since the propagation is usually better, although anytime after 0200Z should be darkpath all across North America.

For this week, let us concentrate on 3579 on the hour from 0200-0500Z. Send a calling round and if you hear anyone, great, if not try again the next hour. That is such a fine QRG, maybe we just need to camp on it a bit more.

Several folks have suggested using the 1843.2khz uart clock rock as a possible frequency. Anyone want to try this sometime?

Comments appreciated to drum up a little more BA/GB fist functioning. I am game for whatever the folks want to try.....

73/ZUT DE NA4G/Bob UP

Date: Mon, 11 Nov 1996 14:51:08 -0600
From: Merv Schweigert <k9fd@htc.net>
To: glowbugs@theporch.com
Subject: 160 BA net
Message-ID: <9611112051.AA28055@ns.htc.net>

Someone suggested using 1843 as net freq for glowbugs/BA net. 1843 is in the SSB portion of the band and used for the DX SSB portion. I dont think it would be very welcome there and the QRM is certainly going to get rough at times.

1800 to 1830 is CW, 1830 to 1840 usually used for DX CW window, 1840 up is SSB.

F Y I 73 K9FD Merv

//////\\
(# #)

-----o00-(_)-00o-----
:
: Merv Schweigert K9FD Collector of Keys, "Bugs", :
: 9694 S. Prairie Road Paddles, Code related gear :
: Red Bud IL 62278 Crystals and Old Heathkits :
: E-Mail k9fd@htc.net Old National HRO NC101 Etc :
: Ph. 618-282-3953 Always looking please call :

Date: Mon, 11 Nov 1996 16:36:27 -0500 (EST)
From: Dave Hockaday <wb4iuy@ipass.net>
To: glowbugs@theporch.com
Subject: Re: 160 BA net
Message-ID: <199611112136.QAA12559@passport.ipass.net>

> Someone suggested using 1843 as net freq for glowbugs/BA
>net. 1843 is in the SSB portion of the band and used for the DX
>SSB portion. I dont think it would be very welcome there and the
>QRM is certainly going to get rough at times.

> 1800 to 1830 is CW, 1830 to 1840 usually used for DX CW

>window, 1840 up is SSB.
> F Y I 73 K9FD Merv

Hi Merv and gang. I think a better place would be in the range of 1880-1890 for AM, above 1900 for SSB, and the very bottom of the band 1800-1810 for ba/gb cw. Just my \$.02 :-)

Dave Hockaday WB4IUY
wb4iuy@ipass.net

<http://www.ipass.net/~hockaday/>
<http://www.ipass.net/~wb4iuy/>
<http://www.ipass.net/~teara/>
<http://www.geocities.com/TheTropics/3349/>
<http://www.RTPnet.org/~fcarc/>
<http://www.RTPnet.org/~rdrc/>

Date: Mon, 11 Nov 96 16:42:08 EST
From: jkh@lexis-nexis.com (John Heck)
To: glowbugs@theporch.com
Subject: Thanks to K40AH
Message-ID: <9611112142.AA05014@beans.lexis-nexis.com>

Garey Barrell, K40AH, very kindly copied and sent to me several copies of articles from Electronics Now and Pop 'Tronics, and I lost his email address. Thanks alot, Garey!!
I have had several requests for copies of the copies and I will get these of to the requesters as soon as I can.
Regards,
John Heck, KC8ETS
1009 Donson Drive
Dayton, Ohio 45429
(513)865-7036(work)
jkh@lexis-nexis.com

Date: Mon, 11 Nov 1996 13:49:46 -0800 (PST)
From: Gordon Gekko <gekko@nwlink.com>
To: glowbugs@theporch.com
Subject: Hey Brian - how about an update on the receiver?
Message-ID: <199611112149.NAA15614@montana.nwlink.com>

Haven't heard anything about the 6U8 superhet project lately. Did see the jpegs, though and looked like a good start on the chassis work.

How's it coming? Any more photos?

Give us an update....:>

Dave WB7AWK
gekko@nwlink.com
kenwood@nwlink.com (when I'm at work goofing off)

Date: Mon, 11 Nov 1996 14:50:46 -0600
From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
To: glowbugs@theporch.com
Subject: TNX for the AM response!
Message-ID: <1.5.4.32.19961111205046.006bbb44@postoffice.worldnet.att.net>

Good to know I'm not the only homebrew AM fan in our group. I thought everybody was low power CW only! I'm on 75, 40 and sometimes try 20 meters if the band isn't too crowded. Homebrew 813 kilowatt AM rigs are really nice. Takes up space in the shack but still fun! Cut my teeth on ham radio in 1973 by listening to the AM'ers in my SWL days. If it wasn't for Gene White (WA5ATH silent key) and Paul Wylie (WA5FHP still around but no longer active) getting on 75 AM almost every night I would have never known what ham radio was in those days.

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Mon, 11 Nov 1996 14:02:54 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: 6293 tube
Message-ID: <199611112200.RAA27197@user2.mnsinc.com>

Hi - can someone tell me what a 6293 is?
It looks just like a 6146.

Thanks - Bry

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Mon, 11 Nov 1996 14:19:41 -0800 (PST)
From: Gordon Gekko <gekko@nwlink.com>
To: glowbugs@theporch.com
Subject: Transformers available
Message-ID: <199611112219.0AA21091@montana.nwlink.com>

I have just acquired a couple REALLY esoteric widow-maker transformers that may have a home in some new amplifier or frankenstein-birth project. They are from a 1950's era carrier-current 3510 Cycle (yes, 3.5 KC) transmitter that was built by Simplex and IBM until the 70's. The transmitter was used in schools and hospitals to couple the 3510 Cycle signal into the power line to be received by thyatron driven receivers that then activated the automatic clock correction circuitry to keep all of the wall clocks in sync. A capacitor bank was used to tweak the freq, and 4 frequencies were commonly used: 3510, 4000, 5010, and 6000. There were many others in this general range. The alternate frequencies were most often used to ring bells in schools. The transmitter is able to produce any 4, one at a time.

The idea of the whole thing was that this signal was EVERYWHERE in the building power grid, and a clock should theoretically work no matter where you plug it in. They worked quite well, actually (I work for a company that services the ones that are still in use, among other things) until the advent of solid-state fluorescent tube ballasts, which for some reason drown out the 3510 signal and make the system unreliable. There are now solid-state versions, but hardly anyone is installing frequency correction systems any more.

Anyway, to my point: I have just come into a complete Simplex Type 618 transmitter which is the highest power unit ever made (500 watts of 3510 !! into the power

line). It uses a pair of 811's in push-pull (of course) to accomplish that.

The main power transformer is rated 3500 volts at about 200 milliamperes (the manual and schematic I have show the voltage but make no mention of current. The 200 mils is based on the 500 watt output, assuming the tubes are not running more than 80% or so).

There is also a separate filament transformer running 5v at a bunch of amps, filament for the 811 (6v I presume), and some flavor of grid bias voltage. I haven't had the nerve to power this thing on the bench and stick my hands in to measure!!

The main transformer appears in good condition (the transmitter was in normal service when removed), and is very beefy construction (as is the whole thing). It's been stored in a basement for a year, but should be fully functional.

Is there any interest in this thing, either complete (preferred) or in parts? I would be willing to trade for more mundane build-it stuff. I'm not fond of building 3500 volt power supplies! Local interest to Tacoma, WA would be preferred since it weighs in at 75 pounds or more. I have a complete service manual for it as well.

Let me know if this is interesting to anyone. This sucker GLOWS! I know - a bootleg VLF station.....hmm <g> Nah - no room for a dipole.

73's

Dave WB7AWK
gekko@nwlink.com
kenwood@nwlink.com (when I'm at work goofing off)

Date: Mon, 11 Nov 1996 15:32:06 -0700
From: jeffd@coriolis.com (Jeff Duntemann)
To: gekko@nwlink.com
Cc: glowbugs@theporch.com
Subject: Re: Hey Brian - how about an update on the receiver?
Message-ID: <1.5.4.32.19961111152728.00b1b1b8@ntserver.coriolis.com>

At 03:53 PM 11/11/96 -0600, WB7AWK wrote:

>Haven't heard anything about the 6U8 superhet project lately. Did
>see the jpegs, though and looked like a good start on the chassis work.
>
>How's it coming? Any more photos?
>
>Give us an update.....>

Actually, I think the JPEGs were mine, tho Brian may also be fooling with a receiver.

Anyway. I set the superhet aside for a couple of weeks whilst I prototyped my public-domain 6L6 design. I took a 5" X 11" piece of heavy-duty PC board and bolted 2 home-made octal prototype sockets to it and started wiring. The 6AG7 oscillator first made noise middle of last week, before I even wired up the final. Screen looks good; 195V drawing 7-8ma, with 475V from an outboard power supply on the plate. Tube got awful hot and makes me wonder if 475 is too much for the poor thing; I've never run a 6AG7 over 350V. But I upped the power rating on the screen resistor to 2W; anyone attempting the circuit should bear that in mind. I^2R is too close to a watt for my comfort.

Sunday morning while Carol was at yoga I wired the rest of the final--only to find on close inspection that my triple 400pf variable was quietly but definitely shorted due to a "disturbed" stator on one section. I finished the rest of the rig anyway, winding the pi net coil on a piece of 7/8" diameter thinwall PVC pipe. Calced it to 12 uH and once wound it measured in at 14. Not too bad--and within tolerance for my not-quite-anything-like-lab-quality L meter.

So I've ordered a new variable from AES and the rig will have to sit until it shows up. (Fortunately, AES is local here and I get stuff VERY quickly from them.)

Finishing the 6L6 took the rest of my discretionary time Sunday, so no further progress was made on the superhet.

I'll take some pictures of the 6L6 once it's done and shaken out. (I need to test it with a couple of other supply voltages too; 475 is my "high" side and I figure if it'll work there without melting down it'll be fine at 400 or 375.) Not sure if I'll put it on the air; depends on how "clean" it is. I mainly want to make sure all the component values are correct. My plan then is to re-implement the circuit on a proper chassis. But if it works stably and reliably on 40 and 80 I'll give the circuit my approval, make any changes, and then hand the thing off to the rest of you. I really want to finish that receiver before I build another transmitter, of which I have many.

And that's all the news benchside here. More as it happens.

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 11 Nov 1996 14:39:38 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: CQ CQ CQ GB! (WAS: Re: BA/GB net bust lately)
Message-ID: <199611112237.RAA01842@user2.mnsinc.com>

Excellent plan. I may also try at 0100 on 7050 and on 3579 kHz if no one shows up on 40m.

Still not using a real GB yet, but it is waiting in the wings!

73 to all - BRY, AF4K

On 11 Nov 96, rdkeys@csemail.cropsci.ncsu.e wrote:

> I have not had good luck on the BA/GB QRG on 80 or 160 and none at
> all on 40 at the 0000/0100/0200 times. Must be the bands or the
> competing RTTY. After 0230 or so, some of us get together on 3520,
> and last night Grandma Hartley was 459 into VE3land from NC on 2
> watts, so I can't really complain that much about the bands. Must
> be the times are not right. I favor later times as better, if
> possible, since the propagation is usually better, although anytime
> after 0200Z should be darkpath all across North America.
>
> For this week, let us concentrate on 3579 on the hour from
> 0200-0500Z. Send a calling round and if you hear anyone, great, if
> not try again the next hour. That is such a fine QRG, maybe we just
> need to camp on it a bit more.
>
> Several folks have suggested using the 1843.2khz uart clock rock as
> a possible frequency. Anyone want to try this sometime?
>
> Comments appreciated to drum up a little more BA/GB fist
> functioning. I am game for whatever the folks want to try.....
>
> 73/ZUT DE NA4G/Bob UP
>

>

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*****
*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** http://www.mnsinc.com/bry/ *
*****
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End of GLOWBUGS Digest 349
